Duwamish Shipyard
Seattle
HZW

CHRISTINE O. GREGOIRE
Director

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4350-150th Ave. N.E. • Redmond, Washington 98052-5301 • (206) 867-7000

August 24, 1990

Mr. Ken Casten
Industrial Services
2610 Vining Place
Bellingham, Washington 98226

Re: TCLP testing of sandblast grit

Dear Mr. Casten:

Thank you for meeting with us on July 31 to discuss the results of the TCLP testing of waste sandblast grit. As you are aware the TCLP test will replace the EP TOX test on September 25, 1990 for large quantity generators.

During the meeting you presented TCLP data for samples of waste grit taken at 13 sites. Your experience with waste sandblast grits from these sources in the past has shown that they do not generally fail EP TOX testing for metals. The TCLP data shows that none of the waste sandblast grits tested designate as TCLP waste. Based on the laboratory analysis presented at the meeting, we see no reason to require the non-metals portion (volatile organics and ABN semivolatiles) of the TCLP testing to be run on samples of waste grit from these sources in the future , unless you or the source has additional information to suggest that the waste grit has been contaminated with volatile organics and/or ABN semivolatiles. Therefore, after September 25, 1990, only the TCLP metals will be required for routine designation at these sites as provided for in Appendix II, Section 1.2 of the TCLP rule (FR Vol. 55, No. 61, March 29, 1990), unless the waste grit has been contaminated with volatile organics and/or ABN semivolatiles.

Of the sampling results you presented on July 31st, nine of the data sources included metals, volatile organics, and ABN semivolatiles, one source included metals, purgeable aromatics, and halogenated volatiles, and three of the sources included metals only (see attached). The volatile organics and ABN semivolatiles portion of the test should be completed for the three sources for which only metals data was presented.

Thank you for your continued cooperation in this matter. As always, if you have additional questions, please don't hesitate to contact me at 867-7053 or Barbara Smith at 867-7019.

Sincerely,

Julie Sellick
Supervisor
Solid and Hazardous Waste Section

JAS:bs

cc: John Conroy, Ecology Redmond
Barbara Smith, Ecology Redmond
Kay Seiler, Ecology Tumwater
Bruce Howard, Ecology Spokane
Dennis Bowhay, Ecology Yakima
Hugh O'Neill, Ecology Olympia
Jack Boller, EPA-WOO, Olympia

TCLP DATA SOURCES - Waste Sandblast Grit

TCLP Metals, Volatile Organics, ABN Semivolatiles

Union Bay - Seattle
Unimar - Seattle
Todd Shipyard - Seattle
Marco - Seattle
Duwamish Shipyard - Seattle
Foss - Seattle
Lake Union Drydock - Seattle
Marine Contractors Inc. - Bellingham
Pacific Fisherman - Seattle

TCLP Metals, Purgeable Aromatics, and Halogenated Volatiles

Tacoma Boat - Tacoma

TCLP Metals Only

Puget Sound Naval Shipyard - Bremerton
Lynnwood Wastewater Treatment Plant - Lynnwood
Coastal Coatings - Seattle

SOUND ANALYTICAL SERVICES, INC.

SPECIALIZING IN INDUSTRIAL & TOXIC WASTE ANALYSIS

4630 PACIFIC HIGHWAY EAST, SUITE B-14, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922- 5047

Report To: Western Services Date: July 13, 1990

Report On: Analysis of Soil Lab No.: 12112-2

IDENTIFICATION:
Sample Received on 07-06-90
Client ID: DW5-90 Duwamish

ANALYSIS:

Sample was analyzed using Toxicity Characteric Leaching Procedure (TCLP) in accordance with Federal Register, November 7, 1988.

Sample was analyzed in accordance with Test Methods for Evaluating Solid Waste, (SW-846), U.S.E.P.A., 1986 Method 8240 (Volatile Organics)

Compounds	Concentration (mg/l)	PQL* (mg/l)	Max. Conc. (mg/l)
Vinyl Chloride	ND	0.010	0.2
Chloroform	ND	0.005	6.0
1,2-Dichloroethane	ND	0.005	0.5
Carbon Tetrachloride	ND	0.005	0.5
Benzene	ND	0.005	0.5
Chlorobenzene	ND	0.005	100
1,1-Dichloroethylene	ND	0.005	0.7
Methyl Ethyl Ketone	ND	0.100	200
Pyridene	ND	0.100	5.0
Tetrachloroethylene	ND	0.005	0.7
Trichloroethylene	ND	0.005	0.5

*PQL - Practical Quantitation Limit - These are the detection limits for this sample. This number is based on sample size, matrix and dilution required.

Continued . . .

SOUND ANALYTICAL SERVICES, INC.

Western Services

Lab No. 12112-2
July 13, 1990

Client ID: DW5-90

Sample was analyzed using Toxicity Characteric Leaching Procedure (TCLP) in accordance with Federal Register, November 7, 1988.

Sample was analyzed in accordance with Test Methods for Evaluating Solid Waste, (SW-846), U.S.E.P.A., 1986 Method 8270 (ABN Semivolatiles)

Compounds	Concentration (mg/l)	PQL* (mg/l)	Max. Conc. (mg/l)
1,4-Dichlorobenzene	ND	0.07	7.5
Hexachloroethane	ND	0.07	3.0
Nitrobenzene	ND	0.07	2.0
Hexachlorobutadiene	ND	0.07	0.5
2,4,6-Trichlorophenol	ND	0.70	2.0
2,4,5-Trichlorophenol	ND	0.70	400
2,4-Dinitrotoluene	ND	0.07	0.13
Hexachlorobenzene	ND	0.07	0.13
Pentachlorophenol	ND	0.70	100
O-Cresol	ND	0.70	200
M-Cresol	ND	0.70	200
P-Cresol	ND	0.70	200
Cresol	ND	0.70	200

*PQL - Practical Quantitation Limit - These are the detection limits for this sample. This number is based on sample size, matrix and dilution required.

Continued . . .

SOUND ANALYTICAL SERVICES, INC.

Western Services

Lab No. 12112-2
July 13, 1990

Client ID: DW5-90

Sample was analyzed using Toxicity Characteric Leaching Procedure (TCLP) in accordance with Federal Register, November 7, 1988.

Contaminant	Concentration (mg/l)	Max Conc., (mg/l)
Arsenic	< 0.1	5.0
Barium	0.5	100.0
Cadmium	< 0.1	1.0
Chromium	< 0.1	5.0
Lead	< 0.1	5.0
Mercury	< 0.05	0.2
Selenium	< 0.1	1.0
Silver	< 0.1	5.0

SOUND ANALYTICAL SERVICES

STAN P. PALMQUIST

SOUND ANALYTICAL SERVICES, INC.

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SURROGATE REPORT/MASS SPECTROMETER

Lab No: 12112-2
Date: July 13, 1990
Client: Western Services
Client ID: DW5-90

Volatile Surrogates

Surrogate	Percent Recovery	Control Limits
Toluene - D8	98.7	81 - 117
Bromofluorobenzene	89.4	74 - 121
1,2-Dichloroethane D4	103	70 - 121

Semi-Volatile Surrogates

Surrogate	Percent Recovery	Control Limits
Nitrobenzene - D5	92.0	23 - 120
2-Fluorobiphenyl	79.1	30 - 115
2-Fluorophenol	83.0	25 - 121
2,4,6-Tribromophenol	52.3	19 - 122

*RPD = relative percent difference
= [(S - D) / ((S + D) / 2)] x 100